



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,324	09/15/2003	Harold D. Beck	03-11	3791
30699	7590	03/23/2006		
DAYCO PRODUCTS, LLC			EXAMINER	
1 PRESTIGE PLACE			AUGHENBAUGH, WALTER	
MIAMISBURG, OH 45342			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/663,324	BECK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Walter B. Aughenbaugh	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 05 January 2006.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-4,6-10 and 20-22 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-4,6-10 and 20-22 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date: _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Acknowledgement of Applicant's Amendments***

1. The amendments made in claims 1-3, 8, 10, 21 and 22 presented in the Amendment filed January 5, 2006 (Amdt. A) have been received and considered by Examiner.
2. Claim 20 is improperly marked up, but correctly labeled as "(Previously Presented)": claim 20 should not be marked up because the text of claim 20 in Amdt. A is the same as the text in claim 20 of the Preliminary Amendment filed October 21, 2004.

### ***WITHDRAWN OBJECTIONS***

3. The objection to claim 22 made of record in paragraph 7 of the previous Office Action mailed October 5, 2005 has been withdrawn due to Applicant's amendment in claim 22 in Amdt. A.

### ***REPEATED REJECTIONS***

#### ***Claim Rejections - 35 USC § 103***

4. The 35 U.S.C. 103 rejection of claims 1-4, 6-10 and 20-22 made of record in paragraph 8 of the previous Office Action mailed October 5, 2005 has been repeated for the reasons previously made of record and for the following reasons that address the amendments made in claims 1 and 10: in regard to claim 1, the tubular structure of Igarashi et al. exhibits heat tolerant characteristics because Igarashi et al. teach that the tubular structure is heat resistant (col. 2, lines 50-54). Any hose is resistant to some degree of pressure, so the hose of Igarashi et al. necessarily exhibits pressure resistant characteristics. The tubular structure of Igarashi et al. exhibits hydrocarbon fluid impermeable characteristics since Igarashi et al. teach that the tubular structure is gas impermeable (col. 2, lines 50-53). In further regard to claim 1, the tubular

Art Unit: 1772

structure of Igarashi et al. comprises a vinyl ester copolymer matrix (ethylene-vinyl acetate copolymer, col. 3, lines 32-35 and col. 4, lines 22-26) where the vinyl ester copolymer matrix contains greater than 40% vinyl ester based on the weight of the copolymer (col. 3, lines 48-51).

In regard to claim 10, Igarashi et al. teach that the tubular structure is for conveying refrigerant in car coolers, air conditioners and other refrigerant-using devices (col. 2, lines 54-57), a teaching which falls within the scope of fluids in an automotive engine cooler, transmission oil cooler, power transmission cooler, radiator or heater. The tubular structure of Igarashi et al. comprises an ethylene-vinyl acetate copolymer matrix (col. 3, lines 32-35 and col. 4, lines 22-26).

#### ***NEW REJECTIONS***

##### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation "consisting essentially of an ethylene-vinyl acetate copolymer matrix" in line 4 of the claim is contradictory to the language of lines 4-7 of the claim, which requires about 40 to 55% of one of more additives chosen from the seven categories of additives recited in the remainder of the claim.

#### ***Response to Arguments***

7. Applicant's arguments regarding the 35 U.S.C. 102 rejection of the claims presented on pages 9-17 of Amdt. A have been fully considered but are not persuasive.

On page 9-10 of Amdt. A, Applicant argues that saponified ethylene vinyl acetate is not ethylene vinyl acetate; however, since Igarashi et al. recommends (and does not require as Applicant alleges) that the degree of saponification be at least 90%, in instances where the degree of saponification is less than 100%, the tubular structure comprises vinyl ester copolymer matrix as claimed in claim 1. The teaching of Igarashi et al. that the heat resistance "tends to be lowered to an insufficient level" is inconclusive and therefore does not teach away from Applicant's claimed subject matter.

In regard to Applicant's discussion regarding the CPA resin of Igarashi et al. on page 10 of Amdt. A, claim 1 does not exclude another resin, such as CPA resin, from the scope of the claim.

In regard to Applicant's discussion regarding claims 4-6 on pages 10-13 of Amdt. A, in instances where the degree of saponification is less than 100%, the tubular structure comprises vinyl ester copolymer matrix as claimed in claim 1.

Applicant's arguments regarding claims 7-9 depend entirely upon Applicant's arguments regarding the rejection to claim 4.

On pages 13-16 of Amdt. A, Applicant argues that saponified ethylene vinyl acetate is not ethylene vinyl acetate; however, since Igarashi et al. recommends (and does not require as Applicant alleges) that the degree of saponification be at least 90%, in instances where the degree of saponification is less than 100%, the tubular structure comprises ethylene-vinyl acetate copolymer as claimed in claims 10 and 20. The teaching of Igarashi et al. that the heat resistance "tends to be lowered to an insufficient level" is inconclusive and therefore does not teach away from Applicant's claimed subject matter.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B. Aughenbaugh whose telephone number is 571-272-1488. While the examiner sets his work schedule under the Increased Flexitime Policy, he can normally be reached on Monday-Friday from 8:45am to 5:15pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is to 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 1772

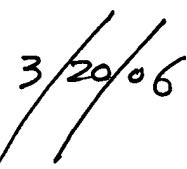
applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Walter B. Aughenbaugh

03/20/06

WBA

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

  
3/20/06